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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PARSLEY, DAVID J

ART UNIT	PAPER NUMBER
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3643

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/648,932

Applicant(s)

LIPS ET AL.

Examiner

David J. Parsley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 13-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Detailed Action

Election/Restrictions

1. Applicant's election of Group I claims 1-12 in the reply filed on 7-1-05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 13-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on 7-1-05.

Claim Objections

2. Claim 1 recites the limitation "said liquid additive" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S.

Patent No. 4,545,396 to Miller et al.

Referring to claim 1, Miller et al. discloses a liquid delivery system for horticultural application comprising, a controller device – at 14-15, 45 and 54-59, electrically connectable to a zone watering control system – at 16-28 and 50-52 – see for example figures 1-2, where the controller is configured to generate and transmit configured fluid control signals to selectively control the flow of pressurized fluid to a plurality of fluid delivery zones – at Regions I and II as seen in figures 1-2 and see column 3 lines 66-68 and column 4 lines 1-36, and the controller further configured to be electrically connectable to at least one additive injector – at 50,52 – see figures 1-2, for introducing the liquid additive into the pressurized fluid flow – see at 28 and 52 in figure 2, the controller being further configured to generate one or more injection control signals to selectively control an injection rate of a liquid additive into the pressurized fluid flow – see for example column 4 lines 30-36 and column 5 lines 13-52, wherein the injection control signals are generated in accordance with at least a first criteria associated with the fluid control signals – see for example column 4 lines 5-68 and column 5 lines 1-52, where the criteria can be the user controlling the device or the criteria can be from the sensors in the soil or at 59.

Referring to claim 2, Miller et al. discloses the at least a first criteria associated with the fluid control signals include at least one of stored data from a memory structure – see column 4 lines 19-22, instructions entered through a user interface – see column 5 lines 4-12 and external data from at least a first external device – see at the soil sensors in column 4 lines 5-18 or the sensors – at 59.

Referring to claim 3, Miller et al. discloses the stored data includes at least one of zone information for each of the fluid delivery zone in the liquid delivery system – see at Regions I and II in figure 2, geographic information relating to at least a first environmental condition associated with the region in which the liquid delivery system is located – see for example column 4 lines 5-36, and horticultural information relating to plant types associated with each of the fluid delivery zone in the liquid delivery system – see for example column 4 lines 5-36.

Referring to claim 4, Miller et al. discloses the zone information includes a flow rate for the each of the fluid delivery zone – see for example column 4 lines 5-68 and column 5 lines 1-52.

Referring to claim 5, Miller et al. discloses the geographic information includes information relating to at least one of soil types associated with the region, precipitation information associated with the region – see for example the soil sensors in column 4 lines 5-36 and the meteorological sensors – at 59 in figure 2.

Referring to claim 6, Miller et al. discloses the external data received from at least a first external device includes at least one of, weather related information received from a weather sensor – at 59, in data communication with the controller – see for example figure 2, and soil related information – see column 4 lines 5-36, received from a soil sensor in data communications with the controller – see for example figure 2.

Referring to claim 7, Miller et al. discloses the injector control signals may be dynamically modified in response to a change detected in the at least first criteria – see for example column 4 lines 5-68 and column 5 lines 1-52.

Referring to claim 8, Miller et al. discloses the injector control signals comprise electrical controls for selectively controlling the rate the additive injector introduces the liquid additive into the pressurized fluid flow – see for example figure 2 and column 4 lines 5-68 and column 5 lines 1-52.

Referring to claim 9, Miller et al. discloses the electrical control signals comprise at least one of pulsating signals, analog signals and digital signals – see for example column 4 lines 5-68 and column 5 lines 1-52, where the signals are described as being intermittent/pulsating and are inherently either analog or digital.

Referring to claim 12, Miller et al. discloses the controller further comprises a first controller – at 14, for generating the fluid control signals – see for example column 4 lines 43-65, and a second controller – at 15, adapted to operate in conjunction with the first controller – see figure 2, to generate the injection control signals – see for example column 4 lines 5-36, wherein the second controller is in data communication with the first controller – see for example figure 2 and column 3 lines 47-65, column 4 lines 1-68 and column 5 lines 1-52.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. as applied to claim 1 above, and further in view of U.S. Patent No. 5,022,585 to Burgess. Miller et al. further discloses the injector comprises a pump – at 52. Miller et al. does not disclose the pump is a motor driven pump or a hydraulic pump. Burgess does disclose the pump is a motor driven pump – at 148 – see for example column 3 lines 23-25. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Miller et al. and add the motor driven pump of Burgess, so as to allow for the pump to be automatically controlled.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. as applied to claim 1 above, and further in view of U.S. Patent No. 4,917,304 to Mazzei et al. Miller et al. does not disclose the controller is configured to generate a plurality of signals to selectively control an injection rate of a plurality of liquid additives into the pressurized fluid flow. Mazzei et al. does disclose the controller – at 14,16, is configured to generate a plurality of signals to selectively control an injection rate of a plurality of liquid additives – at 15-21, into the pressurized fluid flow – at 12 – see for example figure 1 and column 4 lines 1-68 column 5 lines 1-68 and column 6 lines 1-50. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Miller et al. and add the controller generating a plurality of signals to control the injection rate of a plurality of liquid additives of Mazzei et al., so as to allow for the device be adjustable for delivering different additives to the plants fed by the irrigation system.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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The following patents are cited to further show the state of the art with respect to plant/tree watering systems in general:

U.S. Pat. No. 1,991,851 to Hammel – shows watering system with additives

U.S. Pat. No. 2,578,981 to Parker – shows watering system

U.S. Pat. No. 3,570,508 to Boggs et al. – shows injector system

U.S. Pat. No. 3,991,939 to Maclay – shows watering system with controller

U.S. Pat. No. 4,456,176 to Agius – shows watering system with additives

U.S. Pat. No. 4,870,991 to McMillan et al. – shows injection system

U.S. Pat. No. 4,895,303 to Freyvogel – shows watering system with additives

U.S. Pat. No. 5,364,030 to Murdock et al. – shows watering system

U.S. Pat. No. 5,366,159 to Childers – shows watering system

JP Pat. No. 5-38238 – shows watering system

FR Pat. No. 2665051 – shows watering system

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Parsley whose telephone number is (571) 272-6890.

The examiner can normally be reached on Monday-Friday from 8am to 4pm.

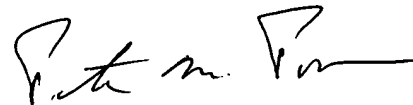
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DP

David Parsley
Patent Examiner
Art Unit 3643



PETER M. POON
SUPERVISORY PATENT EXAMINER

8/12/05